

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-9 (canceled).

1 10. (Currently amended) A vibratable aperture plate comprising:
2 a plate body having a top surface, a bottom surface, and a plurality of apertures
3 extending from the top surface to the bottom surface, wherein each aperture is defined by a
4 tapered portion which tapers inward from the bottom surface toward the top surface and a flared
5 portion that extends from the top surface toward the bottom surface and that flares away from the
6 tapered portion, and wherein the flared portion and the tapered portion ~~have the same~~ share an
7 axis of symmetry such that when a liquid is supplied to the bottom surface and the aperture plate
8 is vibrated, liquid droplets are ejected through the flared portion, wherein the plate body is
9 electroformed to produce the apertures, and wherein the tapered portion at an intersection
10 with the flared portion has a size in the range from about 1 micron to about 10 microns.

1 11. (Original) An aperture plate as in claim 10, wherein the plate body is
2 constructed from materials selected from a group consisting of palladium, palladium nickel and
3 palladium alloys.

1 12. (Original) An aperture plate as in claim 10, wherein the plate body
2 includes a portion that is dome shaped in geometry.

1 13. (Original) An aperture plate as in claim 10, wherein the plate body has a
2 thickness in the range from about 20 microns to about 70 microns.

1 14. (Original) An aperture plate as in claim 10, wherein the apertures have an
2 exit angle that is in the range from about 41° to about 49°.

Claims 15-30 (canceled).

1 31. (Currently amended) An vibratable aperture plate comprising:
2 a plate body having a top surface, a bottom surface, and a plurality of apertures
3 extending from the top surface to the bottom surface, wherein the apertures each include an
4 upper portion and a lower portion, wherein the lower portion extends upwardly from the bottom
5 surface and is generally concave in geometry, and wherein the upper portion is tapered in a
6 direction from the top surface to the bottom surface and intersects at an intersection with the
7 lower portion which flares outward such that when a liquid is supplied to the top surface and the
8 aperture plate is vibrated, liquid passes through the upper portion and is ejected through the
9 lower portion as liquid droplets, wherein the plate body is electroformed to produce the
10 apertures, and wherein the upper portion at the intersection has a size in the range from
11 about 1 micron to about 10 microns.

1 32. (Currently amended) An aperture plate as in claim 31, wherein upper
2 portion has an angle of taper that is in the range from about 30° to about 60° at the intersection
3 with the lower portion, ~~and a diameter that is in the range from about 1 micron to about 10~~
4 ~~microns at the intersection with the lower portion.~~

1 33. (Original) An aperture plate as in claim 32, wherein the lower portion has
2 a diameter at the lower surface that is in the range from about 20 microns to about 200 microns, a
3 height in the range from about 4 microns to about 20 microns.

1 34. (Currently amended) An aperture plate as in claim 31, wherein the bottom
2 surface is adapted to receive a liquid, and wherein the plate body is vibratable to eject liquid
3 droplets from the ~~front~~ top surface.

Claims 35-36 (canceled).

1 37. (Amended) An aperture plate as in claim 10, wherein the flared portion
2 has a height that is approximately one-third of the thickness of the plate body.

- 1 38. (Previously added) An aperture plate as in claim 10, wherein the plate
2 body has a thickness of at least about 20 microns.